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Amendments to the Claims:

This listing of claims as required by 37 C.F.R. 1.121 will replace all prior versions and listing of claims in the application.

- (Original) An immunostimulatory oligonucleotide compound, comprising an
 immunostimulatory dinucleotide of formula 5'-pyrimidine-purine-3', wherein pyrimidine
 is a non-natural pyrimidine nucleoside and purine is a natural or non-natural purine
 nucleoside.
- 2. (Original) An immunostimulatory oligonucleotide compound, comprising an immunostimulatory dinucleotide of formula C*pG, wherein C* is a cytidine analog, G is guanosine, 2'-deoxyguanosine, or a guanosine analog, and p is an internucleotide linkage selected from the group consisting of phosphodiester, phosphorothioate, and phosphorodithioate.
- 3. (Original) The immunostimulatory oligonucleotide compound of claim 0, wherein the non-natural pyrimidine nucleoside has the formula (I):

wherein D is a hydrogen bond donor, D' is selected from the group consisting of hydrogen, hydrogen bond donor, hydrogen bond acceptor, hydrophilic group, hydrophobic group, electron withdrawing group and electron donating group, A is a hydrogen bond acceptor or a hydrophilic group, X is carbon or nitrogen, and S is a

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pentose or hexose sugar ring, provided that the pyrimidine nucleoside of formula (I) is not cytidine or deoxycytidine.

- (Original) The immunostimulatory oligonucleotide compound of claim 3, wherein the non-natural pyrimidine nucleoside includes a non-naturally occurring pyrimidine base.
- 5. (Original) The immunostimulatory oligonucleotide compound of claim 4, wherein the non-naturally occurring pyrimidine base is selected from the group consisting of 5-hydroxycytosine, 5-hydroxymethylcytosine, N4-alkylcytosine, and 4-thiouracil.
- 6. (Original) The immunostimulatory oligonucleotide compound of claim 4, wherein the non-naturally occurring pyrimidine base is selected from the group consisting of 5-hydroxycytosine and N4-ethylcytosine.
- 7. (Original) The immunostimulatory oligonucleotide compound of claim 4, wherein the non-natural pyrimidine nucleoside of formula (I) comprises a non-naturally occurring sugar moiety.
- 8. (Original) The immunostimulatory oligonucleotide compound of claim 7, wherein the non-naturally occurring sugar moiety is arabinose.
- 9-38. (Withdrawn)

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No fees are believed to be due with this amendment. If any fees are required, the Patent and Trademark Office is authorized to charge such fees to deposit account number 50-2285. If the Examiner believes that any discussion of this communication would be helpful, she is invited to contact the undersigned attorney by telephone at 781-933-6630.

Date: $\frac{10}{9}$ 03

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